

Cont'd

- (e) forming one or more pillars from a photoresist having top surfaces on said lower metal layer, defining photoresist pillars;
- (f) plating said photoresist pillars defining plated pillars;
- (g) removing the seed layer not under the lower level ^{metal} layer;
- (h) coating said one or more plated pillars and said seed layer with a low dielectric polymer;
- (i) curing said polymer; *plating on said*
- (j) exposing said top surfaces of said plated pillars; and
- (k) forming a metal layer to contact said exposed top surfaces of said plated pillars.

13. (Amended) A process for forming vias in polymers with low dielectric constants, the process comprising the steps of:

Q2

- (a) providing a substrate layer;
- (b) forming a lower level layer on said substrate, selected from one or more of the group consisting of dielectric, metal and a circuit device;
- (c) forming a bottom metal layer on said lower level layer;
- (d) forming one or more pillars from a photoresist on said lower metal layer;
- (e) coating said one or more pillars with a polymer coating;
- (f) curing said polymer;
- (g) etching back said polymer to expose said one or more pillars;
- (h) removing said one or more pillars to form vias; and
- (i) forming a metal layer to contact said bottom metal layer on top of said polymer coating.